

# Reference Copy Only. Do Not Mail to the FCC as an Application.

Submitted: 09/21/2018 at 16:44:15  
File Number: 0008377556

## FCC 601 Main Form

## FCC Application for Radio Service Authorization: Wireless Telecommunications Bureau Public Safety and Homeland Security Bureau

Approved by OMB  
3060 - 0798  
See instructions for  
public burden estimate

|                                     |                                  |
|-------------------------------------|----------------------------------|
| 1) Radio Service Code:<br><b>IG</b> | 1a) Existing Radio Service Code: |
|-------------------------------------|----------------------------------|

### General Information

|   |  |
|---|--|
| 2) (Select only one) ( <b>RO</b> )<br><b>NE</b> - New <b>RO</b> - Renewal Only <b>AU</b> - Administrative Update <b>NT</b> - Required Notifications<br><b>MD</b> - Modification <b>RM</b> - Renewal/Modification <b>WD</b> - Withdrawal of Application <b>EX</b> - Requests for Extension of Time<br><b>AM</b> - Amendment <b>CA</b> - Cancellation of License <b>DU</b> - Duplicate License <b>RL</b> - Registered Location/Link |  |
| 3a) If this application is for a <u>D</u> evelopmental License, <u>D</u> emonstration License, or a <u>S</u> pecial Temporary Authorization (STA), enter the code and attach the required exhibit as described in the instructions. Otherwise enter ' <u>N</u> ' (Not Applicable).  | ( <b>N</b> ) <u>D</u> <u>M</u> <u>S</u> <u>N/A</u> |
| 3b) If this application is for Special Temporary Authority due to an emergency situation, enter 'Y'; otherwise enter 'N'. Refer to Rule 1.915 for an explanation of situations considered to be an emergency.   | ( ) <u>Yes</u> <u>No</u>                           |
| 4) If this application is for an Amendment or Withdrawal, enter the file number of the pending application currently on file with the FCC.  | File Number  |
| 5) If this application is for a Modification, Renewal Only, Renewal/Modification, Cancellation of License, Duplicate License, or Administrative Update, enter the call sign of the existing FCC license.<br>If this is a request for Registered Location/Link, enter the FCC call sign assigned to the geographic license.  | Call Sign<br><b>WQJN229</b>                        |
| 6) If this application is for a New, Amendment, Renewal Only, or Renewal/Modification, enter the requested authorization expiration date (this item is optional).   | MM      DD<br>/                                    |
| 7) Is this application "major" as defined in §1.929 of the Commission's Rules when read in conjunction with the applicable radio service rules found in Parts 22 and 90 of the Commission's Rules? (NOTE: This question only applies to certain site-specific applications. See the instructions for applicability and full text of §1.929).  | ( ) <u>Yes</u> <u>No</u>                           |
| 8) Are attachments (other than associated schedules) being filed with this application?   | ( <b>N</b> ) <u>Yes</u> <u>No</u>                  |

### Fees, Waivers, and Exemptions

|   |                                   |
|---|-----------------------------------|
| 9) Is the Applicant exempt from FCC application fees?   | ( <b>N</b> ) <u>Yes</u> <u>No</u> |
| 10) Is the Applicant exempt from FCC regulatory fees?   | ( <b>N</b> ) <u>Yes</u> <u>No</u> |
| 11a) Does this application include a request for a Waiver of the Commission's Rule(s)?<br>If 'Yes', attach an exhibit providing rule number(s) and explaining circumstances.            | ( <b>N</b> ) <u>Yes</u> <u>No</u> |
| 11b) If 11a is 'Y', enter the number of rule sections involved.   | Number of Rule Section(s):        |
| 12) Are the frequencies or parameters requested in this filing covered by grandfathered privileges, previously approved by waiver, or functionally integrated with an existing station? | ( ) <u>Yes</u> <u>No</u>          |

**Applicant Information**

|   |                         |  |                          |
|---|-------------------------|--|--------------------------|
| 13) FCC Registration Number (FRN):<br><b>0018144642</b>   |                         |  |                          |
| 14) Applicant/Licensee Legal Entity Type: (Select One)<br><input type="checkbox"/> Individual <input type="checkbox"/> Unincorporated Association <input type="checkbox"/> Trust <input type="checkbox"/> Government Entity <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Limited Liability Company<br><input type="checkbox"/> General Partnership <input type="checkbox"/> Limited Partnership <input type="checkbox"/> Limited Liability Partnership <input type="checkbox"/> Consortium<br><input type="checkbox"/> Other: _____ |                         |  |                          |
| 15) If the Licensee name is being updated, is the update a result from the sale (or transfer of control) of the license(s) to another party and for which proper Commission approval has not been received or proper notification not provided?   |                         |  | ( ) <u>Yes</u> <u>No</u> |
| 16) First Name (if individual):   | MI:                     | Last Name:   | Suffix:                  |
| 17) Legal Entity Name (if other than individual):<br><b>CALIFORNIA INSTITUTE OF TECHNOLOGY</b>  |                         |  |                          |
| 18) Attention To:<br><b>Kathleen Carpenter</b>  |                         |  |                          |
| 19) P.O. Box:   | And/Or                  | 20) Street Address:<br><b>1200 E CALIFORNIA BLVD</b> |                          |
| 21) City:<br><b>PASADENA</b>  | 22) State:<br><b>CA</b> | 23) Zip Code:<br><b>91129</b>                        |                          |
| 24) Telephone Number:<br><b>(626)395-6811</b>   |                         | 25) FAX:   |                          |
| 26) E-Mail Address:<br><b>kathleen.carpenter@caltech.edu</b>  |                         |  |                          |

**27) Demographics (Optional):**

|   |  |  |
|---|--|--|
| <b>Race:</b><br><input type="checkbox"/> American Indian or Alaska Native<br><input type="checkbox"/> Asian<br><input type="checkbox"/> Black or African-American<br><input type="checkbox"/> Native Hawaiian or Other Pacific Islander<br><input type="checkbox"/> White | <b>Ethnicity:</b><br><input type="checkbox"/> Hispanic or Latino<br><input checked="" type="checkbox"/> Not Hispanic or Latino | <b>Gender:</b><br><input type="checkbox"/> Male<br><input type="checkbox"/> Female |
|---|--|--|

**Real Party in Interest**

|  |  |
|--|--|
| 28) Name of Real Party in Interest of Applicant (If different from Applicant): | 29) FCC Registration Number (FRN) of Real Party in Interest: |
|--|--|

**Contact Information (If different from the Applicant)**( ) **Check here if same as Applicant.**

|  |                         |  |         |
|--|-------------------------|--|---------|
| 30) First Name:<br><b>Glenn</b>                      | MI:                     | Last Name:<br><b>Aranas</b>                          | Suffix: |
| 31) Company Name:<br><b>COMMUNICATIONS USA, INC.</b> |                         |  |         |
| 32) Attention To:                                    |                         |  |         |
| 33) P.O. Box:  | And /Or                 | 34) Street Address:<br><b>2229 Enterprise Street</b> |         |
| 35) City:<br><b>Escondido</b>                        | 36) State:<br><b>CA</b> | 37) Zip Code:<br><b>92029</b>                        |         |
| 38) Telephone Number:<br><b>(858)674-1370</b>        |                         | 39) FAX:   |         |
| 40) E-Mail Address:<br><b>glenn@commusa.com</b>      |                         |  |         |

**Regulatory Status**

|  |  |  |  |
|--|--|--|--|
| 41) This filing is for authorization to provide or use the following type(s) of radio service offering (enter all that apply): |  |  |  |
| <input type="checkbox"/> <b>Common Carrier</b>   | <input type="checkbox"/> <b>Non-Common Carrier</b> | <input type="checkbox"/> <b>Private, internal communications</b> | <input type="checkbox"/> <b>Broadcast Services</b> |
| <input type="checkbox"/> <b>Band Manager</b>   |  |  |  |

**Type of Radio Service**

42) This filing is for authorization to provide the following type(s) of radio service (choose all that apply):

( ☒ ) **F**ixed ( ☐ ) **M**obile ( ☐ ) **R**adiolocation ( ☐ ) **S**atellite (sound) ( ☐ ) **B**roadcast Services43) Does the Applicant propose to provide service interconnected to the public telephone network? ( ☐ ) **Y**es ( ☒ ) **N**o**Alien Ownership Questions (If any answer is "Y", provide an attachment explaining the circumstances. In preparing the attachment, refer to the Main Form Instructions for the "Alien Ownership Questions".)**44) Is the Applicant a foreign government or the representative of any foreign government? ( ☐ ) **Y**es ( ☒ ) **N**o45) Is the Applicant an alien or the representative of an alien? ( ☐ ) **Y**es ( ☒ ) **N**o46) Is the Applicant a corporation organized under the laws of any foreign government? ( ☐ ) **Y**es ( ☒ ) **N**o47) Is the Applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country? ( ☐ ) **Y**es ( ☒ ) **N**o48a) Is the Applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens or their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country? ( ☐ ) **Y**es ( ☒ ) **N**o

48b) If the answer to 47 or 48a is 'Y' select one of the choices below.

☐ The Applicant is exempt from the provisions of Section 310(b).*It is not necessary to file a petition for declaratory ruling if the Applicant includes in the attachment required by Item 47 or Item 48a a showing that the requested license(s) is exempt from the provisions of Section 310(b).*☐ The Applicant has received a declaratory ruling(s) approving its foreign ownership, and the application involves only the acquisition of additional spectrum for the provision of a wireless service in a geographic coverage area for which the Applicant has been previously authorized.*If checked, include in the attachment required by Item 47 or Item 48a the citation(s) of the applicable declaratory ruling(s) by DA/FCC number, the FCC Record citation, if available, release date, and a statement that there has been no change in the foreign ownership of the Applicant since the issuance of its ruling.*☐ The Applicant: (i) has received a declaratory ruling(s) approving its foreign ownership, but is not able to make the certification specified immediately above; or (ii) is an "affiliate" of a Licensee or Lessee/Sublessee that received a declaratory ruling(s) under 47 CFR § 1.990(a) and is relying on the affiliate's ruling for purposes of filing this application as permitted under the affiliate's ruling and 47 CFR § 1.994(b).*If checked, and if the Applicant received its declaratory ruling(s) on or after August 9, 2013, include in the attachment required by Item 47 or Item 48a the citation(s) of the Applicant's declaratory ruling(s) by DA/FCC number, the FCC Record citation, if available, release date, and a statement that the Applicant is in compliance with the terms and conditions of its ruling and with the Commission's Rules.**If checked, and if the Applicant received its declaratory ruling(s) prior to August 9, 2013, include in the attachment required by Item 48a a copy of a petition for declaratory ruling filed contemporaneously with the Commission to extend the Applicant's existing ruling(s) to cover the same radio service(s) and geographic coverage area(s) involved in the application. Alternatively, the Applicant may request a new declaratory ruling pursuant to Section 1.990(a) of the Commission's Rules, 47 CFR § 1.990(a). Petitions for declaratory ruling may be filed electronically on the Internet through the International Bureau Filing System (IBFS) (with a copy attached hereto).**If checked, and if the Applicant is relying on an affiliate's ruling for purposes of filing this application, include in the attachment required by Item 47 or Item 48a the citation(s) of the applicable declaratory ruling(s) by DA/FCC number, the FCC Record citation, if available, release date, and a statement that the Applicant is in compliance with the terms and conditions of the named affiliate's ruling and with the Commission's Rules. The Applicant must also include a certification of compliance signed by the named affiliate or other qualified entity as specified in 47 CFR § 1.994(b). See Main Form Instructions for Items 47 or 48a, as applicable.*☐ The Applicant has not received a declaratory ruling approving its foreign ownership and is requesting a declaratory ruling under 47 CFR § 1.990(a) in a petition filed contemporaneously with the Commission.*If checked, include in the attachment required by Item 47 or 48a a copy of the petition for declaratory ruling filed contemporaneously with the Commission pursuant to 47 CFR § 1.990(a). Petitions for declaratory ruling may be filed electronically on the Internet through the International Bureau Filing System (IBFS) (with a copy attached hereto).*

**Basic Qualification Questions**

|   |                          |
|---|--------------------------|
| 49) Has the Applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission?   | ( ) <u>Yes</u> <u>No</u> |
| 50) Has the Applicant or any party to this application, or any party directly or indirectly controlling the Applicant, ever been convicted of a felony by any state or federal court?   | ( ) <u>Yes</u> <u>No</u> |
| 51) Has any court finally adjudged the Applicant or any party directly or indirectly controlling the Applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition? | ( ) <u>Yes</u> <u>No</u> |

If the answer to any of 49-51 is 'Y', attach an exhibit explaining the circumstances.

**Aeronautical Advisory Station (Unicom) Certification**

|  |
|--|
| 52) ( ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application. |
|--|

**Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership**

|   |                          |
|---|--------------------------|
| 53a) Will the requested facilities be used to provide multichannel video programming service?   | ( ) <u>Yes</u> <u>No</u> |
| 53b) If the answer to question 53a is 'Y', does the Applicant operate, control or have an attributable interest (as defined in 47 CFR § 27.1202) in a cable television system whose franchise area is located within the geographic service area of the requested facilities? | ( ) <u>Yes</u> <u>No</u> |

**Note:** If the answer to question 53b is 'Y', attach an exhibit explaining how the Applicant complies with 47 CFR § 27.1202 or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

**Broadband Radio Service and Educational Broadband Service (Part 27)**

|   |                          |
|---|--------------------------|
| 54) (For EBS only) Does the Applicant comply with the programming requirements contained in 47 CFR § 27.1203? | ( ) <u>Yes</u> <u>No</u> |
|---|--------------------------|

**Note:** If the answer to item 54 is 'N', attach an exhibit explaining how the Applicant complies with 47 CFR § 27.1203 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

|   |                          |
|---|--------------------------|
| 55) (For BRS and EBS) Does the Applicant comply with 47 CFR §§ 27.50, 27.55, and 27.1221? | ( ) <u>Yes</u> <u>No</u> |
|---|--------------------------|

**Note:** If the answer to item 55 is 'N', attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

**For Applicants Who Participated in an Auction**

|  |                          |
|--|--------------------------|
| 56) Is the Applicant a qualifying rural wireless partnership or a member of a qualifying rural wireless partnership? | ( ) <u>Yes</u> <u>No</u> |
|--|--------------------------|

**Note:** If the answer to item 56 is 'Y', attach an exhibit listing all members of the qualifying rural wireless partnership, including their FRN numbers.

**General Certification Statements**

|   |
|---|
| 1) The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application.   |
| 2) The Applicant certifies that grant of this application would not cause the Applicant to be in violation of any pertinent cross-ownership or attribution rules.*<br>*If the Applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.  |
| 3) The Applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of this application, and are true, complete, correct, and made in good faith.   |
| 4) The Applicant certifies that neither the Applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to § 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under § 1.2002(c) of the rules, 47 CFR § 1.2002(c). See 47 CFR § 1.2002(b) for the definition of "party to the application" as used in this certification.   |
| 5) The Applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this application, or (3) is not required to file ownership data under the Commission's Rules.   |
| 6) The Applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 CFR § 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 CFR §§ 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.  |
| 7) The Applicant certifies that it has reviewed the appropriate Commission Rules defining eligibility to hold the requested license(s), and is eligible to hold the requested license(s).   |
| 8) The Applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency.   |
| 9) The Applicant certifies that the Applicant and all of the related individuals and entities required to be disclosed on this application and FCC Form 602 (FCC Ownership Disclosure Information for the Wireless Telecommunications Services) are not person(s) who have been, for reasons of national security, barred by any agency of the Federal Government from bidding on a contract, participating in an auction, or receiving a grant. This certification applies only to applications for licenses for spectrum that is required by Sections 6103, 6401-6403 of the Middle Class Tax Relief and Job Creation Act of 2012, codified at 47 U.S.C. §§ 309, 1413, 1451-1452, to be assigned by a system of competitive bidding under 47 U.S.C. § 309(j). |

**Signature**

57) Typed or Printed Name of Party Authorized to Sign

|                             |     |                                |         |
|-----------------------------|-----|--------------------------------|---------|
| First Name:<br><b>Kathy</b> | MI: | Last Name:<br><b>Carpenter</b> | Suffix: |
|-----------------------------|-----|--------------------------------|---------|

58) Title:

**Security Operations Analyst**

Signature:

**Kathy Carpenter**

59) Date:

**09/21/2018****FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.**

Upon grant of this license application, the Licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.

**WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18, § 1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, § 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, § 503).**

Technical Data Schedule for the  
Private Land Mobile and Land Mobile Broadcast Auxiliary  
Radio Services (Parts 90 and 74)

**Eligibility**

|                                  |  |
|----------------------------------|--|
| 1) Rule Section:<br><b>90.35</b> | 2) Describe Activity:<br><b>PRIVATE EDUCATIONAL INSTITUTION USING RADIOS FOR DAY TO DAY OPERATIONS</b> |
|----------------------------------|--|

**Frequency Coordinator Information** (if not self-coordinated)

|  |                                     |                        |                            |
|--|-------------------------------------|------------------------|----------------------------|
| 3)<br>Frequency Coordination<br>Number                 | 4)<br>Name of Frequency Coordinator | 5)<br>Telephone Number | 6)<br>Coordination<br>Date |
|  |                                     |                        |                            |
| 7) Has this application been successfully coordinated? |                                     |                        | ( ) <u>Yes</u> / <u>No</u> |

**Extended Implementation (Slow Growth)**

|   |                            |
|---|----------------------------|
| 8) Are you requesting a new or modified extended implementation plan?<br>If 'Yes', attach an exhibit with a justification and a proposed station construction schedule. | ( ) <u>Yes</u> / <u>No</u> |
|---|----------------------------|

**Associated Call Signs (Attach additional sheets if required)**

|    |  |  |  |  |
|----|--|--|--|--|
| 9) |  |  |  |  |
|----|--|--|--|--|

**Broadcast Auxiliary Only**

|   |                                    |                                      |   |
|---|------------------------------------|--------------------------------------|---|
| If there is an associated Parent Station, complete Items 10-12.   | 10) Facility Id of Parent Station: | 11) Radio Service of Parent Station: | 12) City and State of Parent Station Principal Community: |
|   |                                    |                                      |   |
| 13) If there is no associated parent station, this Applicant is a: ( )<br><u>Cable Network Entity</u> <u>Broadcast Network Entity</u> <u>Television Cable Operator</u><br><u>Large Venue Owner or Operator</u> <u>Motion Picture Producer</u><br><u>Professional Sound Company</u> <u>Television Producer</u> |                                    |                                      | 14) State of Primary Operation:                           |
|   |                                    |                                      |   |

**Control Point(s) (Other than at the transmitter) (Attach additional sheets if required)**

|                        |                                |   |                            |
|------------------------|--------------------------------|---|----------------------------|
| 15)<br>Action<br>A/M/D | 16)<br>Control Point<br>Number | 17)<br>Location<br>Street Address, City or Town, County/Borough/Parish, State | 18)<br>Telephone<br>Number |
|                        |                                |   |                            |

**Antenna Information**

| 19)<br>Action<br>( )<br>A/M/D | 20)<br>Location<br>Number | 21)<br>Antenna<br>Number | 22)<br>AAT<br>(meters) | 23)<br>Antenna Ht.<br>(meters) | 24)<br>Azimuth<br>(degrees) | 25)<br>Beamwidth<br>(degrees) | 26)<br>Polarization | 27)<br>Gain (dB) |
|-------------------------------|---------------------------|--------------------------|------------------------|--------------------------------|-----------------------------|-------------------------------|---------------------|------------------|
|                               |                           |                          |                        |                                |                             |                               |                     |                  |

**Frequency Information**

| 28)<br>Action<br>( )<br>A/M/D | 29)<br>Location<br>Number | 30)<br>Antenna<br>Number | 31)<br>Frequency (MHz) |     | 32)<br>Station<br>Class | 33)<br>No. of<br>Units | 34)<br>No. of<br>Paging<br>Receivers | 35)<br>Output<br>Power<br>(watts) | 36)<br>ERP (watts) | 37)<br>Emission<br>Designators |
|-------------------------------|---------------------------|--------------------------|------------------------|-----|-------------------------|------------------------|--------------------------------------|-----------------------------------|--------------------|--------------------------------|
|                               |                           |                          | Existing (if Mod)      | New |                         |                        |                                      |                                   |                    |                                |